

STATE NATURAL RESOURCES
CASE NO. 2
DATE 3-19-07
FILE NO. HB205
3-19-07

BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

IN THE MATTER OF THE SMITH VALLEY
PETITION FOR CONTROLLED GROUND
WATER AREA NO. 76LJ 30015063

PROPOSAL FOR DECISION - 11/13/06
Filed - 8/20/04

Pursuant to the Montana Water Use Act, Mont. Code Ann. §§ 85-2-506 and -507 (2005), and after notice required by law, a hearing was held beginning on April 24, 2006, in Kalispell, Montana, to determine if the Department of Natural Resources and Conservation (DNRC or Department) shall order the area in question to be designated as a controlled ground water area (CGWA), temporary CGWA pending further study, or reject the petition for a CGWA. The Department has considered the record consisting of all evidence, testimony, and argument submitted concerning the Petition.

PARTIES

As set out in the *Smith Valley Controlled Ground Water Area Notice of Hearing* and the *Smith Valley Controlled Ground Water Area Notice of Hearing Procedures*, all individuals or entities that signed the Petition or filed a Notice of Appearance by June 22, 2005, and were not defaulted to Limited Party Status by the Hearing Examiner or by their own choice, are considered Full Parties. Limited Parties are those persons who attended the hearing (Part 1) in this matter and presented oral or written testimony, but did not wish to participate in prehearing proceedings¹. Petitioners or Full Parties who presented testimony during the Limited Party hearing were informed prior to testifying that they could not be both Full Party and Limited Party. Full Parties testifying during the Limited Party hearing were converted to Limited Parties at that time.

Petitioners retaining their Full Party status at the time of the Full Party hearing include: Elaine Badley, Andrew Breland, Penelope Collins, Robyn Dickson, Shawna Floyd, Reed Gregerson, Kathleen Huff, Frank Johnson, Rhonda Kearney, Mike Laychak, Sharon Manyx,

¹ Limited Parties requesting a copy of this Proposal and providing a mailing address are listed on the Certificate of Service for this Proposal.

1 was not disclosed by Petitioner Floyd in the required prehearing disclosures. The Hearing
2 Examiner **SUSTAINED** the objection, and **STRUCK** the testimony of Mr. Garber.

3 During the hearing and in post hearing briefs some Petitioners expressed their position
4 that their voice had not been heard and their evidence not allowed into the record. In this case
5 there was a procedural order in place from July 25, 2005, set out to bring the matter to a full and
6 fair hearing. Petitioners had every opportunity to get their evidence into the hearing record
7 according to the procedural order. Information not timely produced as required by the
8 procedural order and subsequent orders was not allowed into the record.

9 The schedule in this matter allowed for post hearing briefs or position statements from
10 Petitioners and Full Parties who had not been defaulted to Limited Party status. A Joint Post
11 Hearing Brief was received from the Gibson and Sudan Groups. Also, an apparent post hearing
12 brief was received from Petitioners and Full Parties Bruce Rubin, D. Brent Mitchell, Kay Mitchell,
13 Kathy Huff, Tina Mena, Mike Laychak, Don Collins, Sharon Manyx, Shawna Floyd, James
14 Oxford, and Reed Gregerson. Also, enclosed with the package from the Petitioners were 10
15 post hearing briefs from interested parties, Full Parties, and Limited Parties, and Petitioner
16 Floyd's Exhibit Nos. 47 and 73; The package from the Petitioners contains information that is
17 totally inappropriate for a post hearing brief. References to: (1) rejected exhibits, (2) Exhibits
18 which were not offered and accepted into the record, (3) what appears to be written testimony,
19 and (4) a brief from Petitioner Floyd's expert witness who is not a Full Party in this matter. Upon
20 Motion by the Gibson and Sudan groups, the Hearing Examiner ruled: "To the extent
21 Petitioners' or other Full Parties' Post Hearing Briefs and other materials submitted with the Post
22 Hearing Briefs contain argument on evidence or exhibits not in the record, or contain evidence
23 or exhibits not in the record, it is **STRICKEN**."

24 25 FINDINGS OF FACT

26 General

27
28 1. A Petition for a Controlled Ground Water Area was filed with DNRC on August 20, 2004.
29 The Petition was submitted with signatures of at least 20 users of ground water from within the
30 proposed area in which there were alleged to be one or more facts showing the criteria stated in
31 MCA §§ 85-2-506(2)(a-g). The Petition was determined to be complete on February 15, 2005,
32 by the Department's Kalispell Water Resources Regional Office. (Department file)

1 eastern portion of Smith Valley. Thus, wells within the proposed CGWA have different ground
2 water sources from wells located east and south of the proposed CGWA. (Exhibit No. G46 p.2,
3 testimony of Spratt).

4 **Ground Water Withdrawals Are In Excess Of Recharge To The Aquifer Or Aquifers Within**
5 **The Ground Water Area**

6
7 10. GWIC well data indicate there are 279 wells within the proposed CGWA that have been
8 drilled as of February 2006. (Testimony of Breckenridge, Exhibit No. G95B).

9 11. Petitioners provided no credible scientific characterization of the aquifers, sources of
10 recharge, watershed characteristics or hydrogeological conditions within the proposed CGWA.
11 Neither did the Petitioners provide any quantification or estimate of withdrawals from the area or
12 recharge to the area. The Petition did contain some precipitation gage information for Kila and
13 Kalispell, both outside the CGWA. (Petition, testimony of Drake, Hafferman, Uthman; Exhibit
14 Nos. G39, G40, G46)

15 12. The opponents provided credible scientific characterization of the surface geology,
16 subsurface geology (north-south cross section, Exhibit No. G3K, east-west cross section,
17 Exhibit No. G3J), aquifers, sources of recharge, watershed characteristics and hydrogeological
18 conditions within the proposed CGWA, including bedrock aquifer hydraulic properties, bedrock
19 aquifer permeability distribution, gravel aquifer permeability distribution, and a credible
20 quantification or estimate (based on scientific literature, well log information, and field data) of
21 withdrawals from and recharge to the CGWA. (Testimony of Spratt)

22 13. Hydrogeologist Marc Spratt for the Opponents prepared a hydrologic balance for the
23 area, based on credible data and conservative assumptions, supported by scientific literature.
24 The hydrologic balance provides a first order of approximation of the magnitudes of recharge,
25 appropriation and use, and demonstrates that withdrawals are not exceeding recharge within
26 the proposed CGWA. Based on computer database information and predictive computer models
27 specific to the Smith Valley area from the National Water and Climate Center and Spatial
28 Climatic Analysis Service of Oregon State University, the average annual precipitation within the
29 boundaries of the proposed CGWA is 16 inches. The average annual precipitation within the
30 watershed basin, of which the proposed CGWA is a part, is 20.24 inches. The difference is
31 explained by the fact that the watershed in which the proposed CGWA is located includes
32 mountainous areas which receive higher precipitation. The recharge available from annual

precipitation may vary. Montana Bureau of Mines and Geology, LaFave, J.I, *et al*, 2004, *Ground-Water Resources of the Flathead Lake Area* suggests a recharge rate of 50% of average annual precipitation for the entire Flathead basin. The Montana Department of Environmental Quality (DEQ) suggests 20% of average annual precipitation goes to recharge (based on studies from Arizona). Based on these various recharge and annual precipitation rates, the recharge for the watershed in which the proposed CGWA basin is located is estimated at: 3,769 acre-feet (16" average annual precipitation, 20% recharge rate); or 4,712 acre-feet (20" average annual precipitation, 20% recharge rate); or 11,779 acre-feet (20" average annual precipitation, 50% recharge rate). Based on DNRC records, the authorized ground water appropriations within the proposed CGWA are 349.47 acre-feet annually. Therefore, existing authorized appropriations represent 3 - 10% of the average annual recharge from precipitation without consideration of return flows. Actual use is less than what is shown on paper to be authorized appropriations. Actual ground water diversions are estimated at 245 acre-feet per year. Estimated return flows from uses within the proposed CGWA are estimated to range from 111 to 222 acre-feet per year. This leaves an estimated net consumption within the proposed CGWA of 23 - 134 acre-feet per year. Existing ground water consumption within the proposed CGWA represents approximately 1 - 4% of the average annual recharge from precipitation within the basin, considering return flows. Ground water withdrawals are not exceeding recharge to the aquifer or aquifers within the proposed CGWA. (Testimony of Spratt, Exhibit Nos. G3A-KK).

Excessive Ground Water Withdrawals Are Very Likely To Occur In The Near Future Because Of Consistent And Significant Increases In Withdrawals From Within The Ground Water Area

14. Excessive ground water withdrawals in the proposed CGWA are not likely to occur in the near future, nor is it likely that consistent or significant increases in withdrawals within the proposed CGWA will occur. The evidence offered by Petitioners in relation to lot creation and potential growth was limited to either Kalispell or Flathead County generally. There are a number of factors which make the specific CGWA area one with a low potential for growth and development. These factors include restrictions on building in sloped areas, lack of city services (fire, sewer, piped water), restrictions on building near forested fire-prone areas, the recent re-write of the state Subdivision and Platting Act, Mont. Code Ann. § 76-3-101, *et seq.*, (making creation of subdivisions more difficult), implementation of a new County growth plan required by

1 October 1, 2006, and implementation of new Flathead County subdivision regulations which will
2 prevent growth on dead-end roads (subdivisions will have to have two accesses to two Flathead
3 County roads). Graphs of lot creation in Flathead County and in the proposed CGWA
4 demonstrate that the growth in the proposed CGWA is minimal compared to the creation of lots
5 in Flathead County overall. In absolute terms, the number of subdivision lots created annually in
6 the proposed CGWA has been small. Additionally, trend lines based on past performance for
7 Flathead County as a whole and for the area of the proposed CGWA show a much lower rate of
8 lot growth in the proposed CGWA than in Flathead County as a whole. Similar absolute values
9 and trends exist with respect to the wells drilled within the proposed CGWA and wells drilled
10 within Flathead County as a whole. (Testimony of Breckenridge, Exhibit Nos. G95, G95A).

11 15. There is nothing in the record to suggest that such modest growth within the proposed
12 CGWA will result in excessive ground water withdrawals in the near future. Neither can it be
13 said that this growth pattern demonstrates that consistent or significant increases in withdrawals
14 will occur. This is particularly so given that the currently proposed additional development of
15 ground water withdrawals represents a low percentage of the average annual recharge for the
16 proposed CGWA. For example withdrawals associated with the 20 homes to be located in the
17 four 5-lot minor Gibson subdivisions, including all domestic use and irrigation of 5 acres were
18 estimated at 19 acre-feet per year, without consideration of possible return flows. (Testimony of
19 Breckenridge, Exhibit Nos. G95, G95A, testimony of Hafferman, Exhibit No. G40, testimony of
20 Pitman).

21 Significant Disputes Regarding Priority Of Rights, Amounts Of Ground Water In Use By
22 Appropriators, Or Priority Of Type Of Use Are In Progress Within The Ground Water Area

23
24 16. The Kalispell Water Resources Regional Office has received 5 formal complaints
25 (disputes) in the proposed CGWA since the Kalispell Water Resources Regional Office started
26 keeping track of written complaints. (Testimony of Kurt Hafferman)

27 17. No significant disputes regarding priority of rights, amounts of ground water in use by
28 appropriators, or priority of type of use are in progress or under continuing investigation within
29 the proposed CGWA. There is no evidence of any senior surface or ground water user seeking
30 an injunction against a junior ground water user. The Department has received 5 formal water
31 complaints related to the area. This number was considered low by the Manager of the DNRC
32 Kalispell Water Resources Regional Office in comparison to other areas under the supervision

1 vary. Mr. Sudan testified he had always obtained water when he drilled within the proposed
2 CGWA, although occasionally the yields were low. Driller Erickson related his experience that
3 even low producing wells of 1 gpm, when combined with cistern storage systems, can provide
4 for all usual domestic and lawn irrigation needs. If a well owner is not satisfied with a well yield,
5 the options explained by drillers Sudan and Erickson include deepening the well, drilling a
6 replacement well, using a cistern storage system, or "frac-ing" the well (pressure fracturing of
7 rock in the well to increase flow). (Testimony of Sudan, testimony of Erickson.)

8 20. Ground water levels in the wells monitored within the proposed CGWA have had
9 declining water levels for the past years. Declining water levels are likely the result of the recent
10 lower precipitation levels and not the result of ground water withdrawals. There is no correlation
11 between water levels and time drilled, or yield within the proposed CGWA. (Testimony of Marc
12 Spratt)

13 21. The periodic readings offered by the Petitioners included 3 readings on the Floyd well
14 (3/1/04, 6/12/04, 9/9/05) showing that the water levels on 6/12/04 and 9/9/05 were higher than
15 3/1/04 (although 6/12/04 was 3.5 feet higher than 9/9/05). ~~These~~ ^{The} very limited data do not
16 demonstrate excessive declines. (Exhibit No. P72)

17 22. In December 2004, Schwarz Architecture & Engineering installed an electronic well
18 logger on an unused well in the Nez Perce subdivision (referred to as the west well in
19 monitoring reports). This electronic logger has taken thousands of static level readings (at five-
20 minute intervals) from December 19, 2004 to the time of the hearing. Similar electronic
21 monitoring was conducted in an unused well located in the Chippewa subdivision (north and
22 east of the Nez Perce monitoring well, referred to as the east well). These data were collected
23 from July 2005 until the time of the hearing. The data from these two wells are the best and
24 most comprehensive monitoring data available within the proposed CGWA. The two monitored
25 wells are in the vicinity of a number of the Petitioners' wells (Floyd, Lofgren, Kearney, Ivans,
26 Sundh, and Mena (shared with Petitioners Breland and Rubin)). The hydrographs of the
27 monitored wells indicate a series of numerous recharge events over time, with a static water
28 level decline during the summer months (presumably due to irrigation), and recovery starting
29 after the close of the irrigation season. In both wells, static levels increased from the date
30 monitoring commenced through the evidentiary deadline for hearing. (Testimony of Pitman,
31 Exhibit Nos. G74, G75, G77, G78, G79, G80, G81, G82, G83, testimony of Spratt, Exhibit No.
32 G56-pg 12).

23. Ground water levels or pressures have not declined excessively. Ground water levels fluctuate with seasonal discharge and recharge. Additionally ground water levels fluctuate over longer cycles of above average precipitation and drought. The hydrograph for Kalispell's Woodland Park (well 82139) reflecting water levels in the massive aquifer in the Flathead Valley shows that the years 1995 to 1998 were generally years of above average precipitation and that years 1999 - 2005 were generally years of below average precipitation. As part of this cycle, water levels declined generally during the drought years, although annual recharge events occurred each year. The hydrograph of the well adjacent to the proposed CGWA on U.S. Highway 2 (well 120810) has a similar drought induced pattern. The evidence is not sufficient to show that ground water levels or pressures within the proposed CGWA are declining or have declined for any reason other than the present drought cycle. Additionally, the evidence is not sufficient to show that any decline of ground water levels or pressures has been excessive.

Public Health, Safety, Or Welfare Requires A Corrective Control To Be Adopted

24. The record does not show that public health, safety, or welfare requires corrective control.

Wasteful Use Of Water From Existing Wells Or Undue Interference With Existing Wells

25. There is not a wasteful use of water from existing wells or undue interference with existing wells. No evidence was introduced showing ongoing wasteful uses of water. There was some evidence of wasteful or unauthorized uses in the past, but these have been resolved. The flowing artesian well on the Marquardt farm, near the center of the CGWA (in the vicinity of the minor subdivisions of the Gibson family members, Nez Perce, Cheyenne, Cherokee, and Chippewa), was allowed to flow uncapped at 10 gpm for a number of the recent drought years; however, the well has now been capped. There was some evidence that Petitioner Sundh, located adjacent to the Gibson minor subdivisions, watered stock for several years from the well on the Sundh property, without having filed for any water rights. This practice stopped in 2003 and Petitioner Sundh obtained water rights for domestic use in that year. No evidence of undue interference with existing wells was offered. (Testimony of Hafferman, Marc Spratt, Kay Sundh, Exhibit No. G38)

ground water by others; or (3) any of the facts alleged in the Petition are true. That is, in this case: (a) that ground water withdrawals are in excess of recharge to the aquifer or aquifers within the ground water area; (b) that excessive ground water withdrawals are very likely to occur in the near future because of consistent and significant increases in withdrawals from within the ground water area; (c) that significant disputes regarding priority of rights, amounts of ground water in use by appropriators, or priority of type of use are in progress within the ground water area; (d) that ground water levels or pressures in the area in question are declining or have declined excessively. Mont. Code Ann. §§ 85-2-506(2) and -507(2). See Issues on page 4.

3. The public health, safety, or welfare does not require corrective controls to be adopted. There is no evidence that the public health, safety, or welfare is not presently adequately protected. At this time, the facts do not support area-wide controls. The aquifers within the proposed boundaries of the CGWA have recharge considerably in excess of current , authorized appropriations and in even greater excess over present use. Mont. Code Ann. § 85-2-507(2)(a). See Finding of Fact No. 24.

4. The evidence does not show a wasteful use of water from existing wells or undue interference with existing wells. No evidence was presented alleging or showing ongoing wasteful uses of water. Mont. Code Ann. §85-2-507 (2)(b)(i). See Finding of Fact Nos. 25.

5. Because a well owner is experiencing problems may not mean the aquifer should be closed to additional appropriations. Appropriators have a responsibility to construct an adequate means of diversion that reasonably penetrates the aquifer. To hold that an appropriator is entitled to maintain wells that penetrate only the upper portion of an aquifer against subsequent appropriators, would be to allow a single appropriator or a limited number of appropriators to control an entire aquifer simply to make their own means of diversion easier. See In The Matter of Application 41R-31441 by McAllister, Proposal for Decision, (1985); 41B-71133 by Hildreth, Proposal for Decision (1989); 41QJ-78511 by Big Stone Colony, Proposal for Decision, (1992). Mont. Code Ann. §. 85-2-401. See Finding of Fact No. 19.

6. There is not sufficient evidence to show that any proposed use or well will impair or substantially interfere with existing rights to appropriate surface water or ground water by others. Mont. Code Ann. § 85-2-507(2)(b)(ii). See Findings of Fact Nos. 26, 27, 28, 29, 30.

7. No proposed use or well will impair or substantially interfere with existing rights to appropriate surface water or ground water by others. No analysis of existing water rights for surface or ground water was presented. No analysis of the effect of projected future growth on